

The effects on date and times of manipulating email messages within Outlook 2007

Introduction

This paper was created out of the need to establish the effects of manipulating email messages within Outlook 2007 for a recent client file. Although the test was carried out in a controlled environment it is intended only as a report of findings and is no way a white paper on the subject.

The method used was to create a series of controlled email messages that were sent to a Windows 7 computer running a clean install of Outlook 2007, with all the default settings set to default except that the Junk mail filter was switched off and the email address used to send the email accounts from was added to the "Safe senders". This was identified as being needed to prevent Outlook recognizing the emails as Junk mail. The view pane was turned off to prevent accidental viewing of email messages.

F-Response Field kit was installed on the suspect computer and a live analysis of the Outlook PST file was carried out using the excellent Intella software by Vound Software. Intella version 1.3 was used to carry-out the review of the PST files containing the saved emails.

Method

A series of 15 email messages were created and sent from a test outlook account using two clean email accounts with an ISP mail account. The messages were sent from one computer to another using the POP3 and SMTP functions of the ISP email server, no other mail server setup (IMAPI or Exchange) was tested and Outlook 2007 was used to send and received the emails.

Once the emails were received they were subjected to different actions within Outlook 2007 and the resultant changes to the dates and times of the email messages were noted and the differences reported.

The dates and times reviewed were;

1. Message Sent
2. Message Received
3. Message Created
4. Message Last Modified

Test Conducted

Message Number	Action taken on Received Email
Message 1	The email message was received and not edited or moved in any way.
Message 2	The email message was received and deleted straight away.
Message 3	The email message was received and immediately moved to another folder in the same PST file.
Message 4	The email message was received and immediately moved to another PST File (Archive)
Message 5	The email message was received and then deleted and then undeleted by dragging the message from the deleted items back to the inbox.
Message 6	The email message was received and then replied to no further actions were taken
Message 7	The email message was received and then replied too, an edit was made and then the message was saved as a draft only. This message was then not sent.
Message 8	The email message was received and replied too, an edit was made and then the message was NOT saved as a draft.
Message 9	The email message was received and then resent using the "Resend" option no edits were are made.
Message 10	The email message was received and then dragged from inbox to outbox.
Message 11	The email message was received and then read and then marked as unread.
Message 12	A new message created and saved in drafts only and not sent.
Message 13	The email message was received and then replied to with insertion of word, then sent.
Message 14	The email message was received and then forwarded no edits were made, and then sent.
Message 15	The email message was received after previously being viewed in webmail.

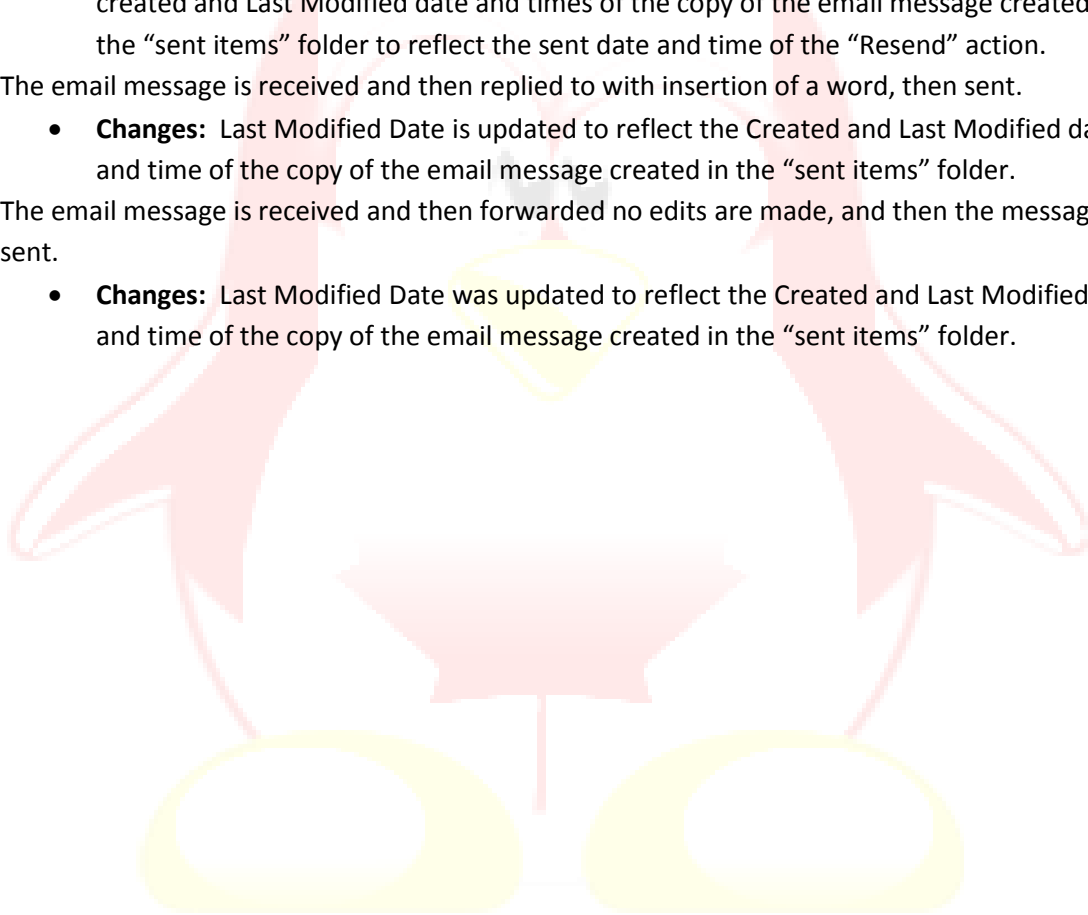
Results

Message Number	Action taken on Received Email
Message 1	No changes made to dates and times.
Message 2	No changes made to dates and times.
Message 3	No changes made to dates and times.
Message 4	No changes made to dates and times.
Message 5	No changes made to dates and times.
Message 6	Last Modified Date was updated to reflect the created and Last Modified date and time of the copy of the email message created in the "sent items" folder.
Message 7	Last Modified date and time is updated to reflect the date and time when the save of the edited draft message was made.
Message 8	No changes made to dates and times.
Message 9	No changes made to dates and times to the original email message. The created and Last Modified date and times of the copy of the email message created in the "sent items" folder to reflect the sent date and time of the "Resend" action.
Message 10	No changes made to dates and times.
Message 11	No changes made to dates and times.
Message 12	Date and time value reflect the date and time of the creation of the email message.
Message 13	Last Modified Date was updated to reflect the Created and Last Modified date and time of the copy of the email message created in the "sent items" folder.
Message 14	Last Modified Date was updated to reflect the Created and Last Modified date and time of the copy of the email message created in the "sent items" folder.
Message 15	No changes made to dates and times.

Conclusion

The following actions taken with email messages within a PST file result in changes being made to the dates and times associated with the email message.

1. The email message is received and then replied to.
 - **Changes:** Last Modified Date is updated to reflect the created and Last Modified date and time of the copy of the email message created in the “sent items” folder.
2. The email message is received and then resent using the “Resend” option.
 - **Changes:** No changes made to dates and times to the original email message. The created and Last Modified date and times of the copy of the email message created in the “sent items” folder to reflect the sent date and time of the “Resend” action.
3. The email message is received and then replied to with insertion of a word, then sent.
 - **Changes:** Last Modified Date is updated to reflect the Created and Last Modified date and time of the copy of the email message created in the “sent items” folder.
4. The email message is received and then forwarded no edits are made, and then the message is sent.
 - **Changes:** Last Modified Date was updated to reflect the Created and Last Modified date and time of the copy of the email message created in the “sent items” folder.



Sending Computer				Receiving Computer Information			
Message Name	Message Action	Message Created	Message Sent	Message Sent	Message Received	Message Created	Last Modified
Message 1	No actions	04/20/2010 14:02	04/20/2010 14:03	04/20/2010 14:03	04/20/2010 14:03	04/20/2010 14:55	04/20/2010 14:55
Message 2	Received and deleted straight away	04/20/2010 14:07	04/20/2010 14:08	04/20/2010 14:08	04/20/2010 14:08	04/20/2010 14:55	04/20/2010 14:55
Message 3	Move to another folder in the same PST file	04/20/2010 14:24	04/20/2010 14:25	04/20/2010 14:25	04/20/2010 14:25	04/20/2010 14:55	04/20/2010 14:55
Message 4	moved to another PST File (Archive).	04/20/2010 14:24	04/20/2010 14:26	04/20/2010 14:26	04/20/2010 14:26	04/20/2010 14:55	04/20/2010 14:55
Message 5	Message is deleted and then undeleted	04/20/2010 14:26	04/20/2010 14:27	04/20/2010 14:27	04/20/2010 14:27	04/20/2010 14:55	04/20/2010 14:55
Message 6	Message is replied to no further actions	04/20/2010 14:27	04/20/2010 14:28	04/20/2010 14:28	04/20/2010 14:28	04/20/2010 14:55	04/20/2010 15:03
Message 6 Copy 1	Sent Items			04/20/2010 15:03	04/20/2010 15:03	04/20/2010 15:03	04/20/2010 15:03
Message 7	Message is received then replied too, edited and saved as a draft only NOT SENT	04/20/2010 14:28	04/20/2010 14:27	04/20/2010 14:27	04/20/2010 14:27	04/20/2010 14:55	04/20/2010 15:03
Message 7 Copy 1	Sent Items			04/20/2010 14:29	04/20/2010 14:29	04/20/2010 15:04	04/20/2010 15:04
Message 8	Message is received then replied too, edited and NOT saved as a draft NOT SENT	04/20/2010 14:29	04/20/2010 14:30	04/20/2010 14:30	04/20/2010 14:30	04/20/2010 14:55	04/20/2010 14:55
Message 9	Message is resent using the Resend option no edits are made	04/20/2010 14:30	04/20/2010 14:31	04/20/2010 14:31	04/20/2010 14:31	04/20/2010 14:55	04/20/2010 14:55
Message 9 Copy 1	Inbox Copy 2			04/20/2010 15:06	04/20/2010 15:06	04/20/2010 15:08	04/20/2010 15:08
Message 9 Copy 2	Sent Items			04/20/2010 15:06	04/20/2010 15:06	04/20/2010 14:55	04/20/2010 15:06
Message 10	Received and dragged from inbox to outbox	04/20/2010 14:31	04/20/2010 14:32	04/20/2010 14:32	04/20/2010 14:32	04/20/2010 14:55	04/20/2010 14:55
Message 11	Read and then marked as unread	04/20/2010 14:32	04/20/2010 14:32	04/20/2010 14:32	04/20/2010 14:32	04/20/2010 14:55	04/20/2010 14:55
Message 12	New message created and saved in drafts only NOT SENT				04/20/2010 15:07	04/20/2010 15:07	04/20/2010 15:07
Message 13	Replied to with insertion of word banana	04/20/2010 14:33	04/20/2010 14:34	04/20/2010 14:34	04/20/2010 14:34	04/20/2010 14:55	04/20/2010 15:08
Message 13 Copy 1	From sent items			04/20/2010 15:08	04/20/2010 15:08	04/20/2010 15:08	04/20/2010 15:08
Message 14	Received and forwarded no changes	04/20/2010 14:34	04/20/2010 14:35	04/20/2010 14:35	04/20/2010 14:35	04/20/2010 14:55	04/20/2010 15:08
Message 14	Sent items Forwarded			04/20/2010 15:08	04/20/2010 15:08	04/20/2010 15:08	04/20/2010 15:08
Message 15	Viewed in webmail then received no other changes made	04/20/2010 14:35	04/20/2010 14:36	04/20/2010 14:36	04/20/2010 14:36	04/20/2010 14:53	04/20/2010 14:53